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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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**Complete if Known**

Application Number	
Filing Date	09-17-2003
First Named Inventor	WILLIAM E. VANDERLUNDE
Art Unit	
Examiner Name	
Attorney Docket Number	VANDERLUNDE-1

Sheet	1	of	4
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## U. S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS

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Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, otherwise leave blank.

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## INFORMATION DISCLOSURE STATEMENT

1. U.S. Pat. No. 4,596,929, entitled "THREE-STAGE SECONDARY EMISSION ELECTRON DETECTION IN ELECTRON MICROSCOPES," discloses a device that uses two grids to maximize the amount of secondary emission detected by a scintillator. The present invention does not employ two such grids.

2. U.S. Pat. No. 4,627,009, entitled "MICROSCOPE STAGE ASSEMBLY AND CONTROL SYSTEM," discloses a device for rotating and tilting a sample in a non-eucentric manner and compensate for the same so that an inspection point is within the field of view. The present invention does not rotate and tilt a sample in a non-eucentric manner and compensate for the same so that an inspection point is within the field of view.

3. U.S. Pat. No. 5,179,280, entitled "COMPUTER CONTROL OF THE ELECTRON MICROSCOPE SAMPLE STAGE," discloses a device for tilting a sample so that a plurality of different orientations are displayed stereoscopically with a spot representing a current orientation. The present invention does not tilt a sample so that a plurality of different orientations are displayed stereoscopically with a spot representing a current orientation.

4. U.S. Pat. No. 5,510,624, entitled "SIMULTANEOUS SPECIMEN AND STAGE CLEANING DEVICE FOR ANALYTICAL ELECTRON MICROSCOPE," discloses a device for cleaning both a sample stage, a sample, and an interior of an analytical electron microscope.

The present invention does not clean either a sample stage, a sample, or an interior of an analytical electron microscope.

5. U.S. Pat. No. 6,025,592, entitled "HIGH TEMPERATURE SPECIMEN STAGE AND DETECTOR FOR AN ENVIRONMENTAL SCANNING ELECTRON MICROSCOPE," discloses a device that can heat a sample to 1500 degrees Celsius. The present invention does not heat a sample to 1500 degrees Celsius.

6. U.S. Pat. No. 6,407,850, entitled "AUTO TILT STAGE," discloses a device for tilting a sample stage to multiple positions. The present invention does not tilt a sample stage to multiple positions.

7. In a book entitled "Scanning Electron Microscopy and X-ray Microanalysis, a Text for Biologists, Materials Scientists, and Geologists, 2Ed.," by Joseph I. Goldstein et al., published in 1992, pps. 267-270, it was disclosed that the resolution of a STEM may be achieved in a SEM by mounting a thin sample of the item to be viewed across an opening in a sample stage, placing either a scintillator coupled to a light pipe or a solid-state detector below the sample stage. The disadvantages of this method are that lateral scattering of electrons passing through the sample will determine the upper limit of image resolution and placing a scintillator and light-pipe or solid-state device under the sample stage requires modifications to the SEM which result in time-consuming setup procedures. Goldstein et al. also suggests using a tilted scattering surface of a high-atomic number. The disadvantage of this method is that lateral scattering of electrons passing through the sample will determine the upper limit of image resolution.